ſo that the cork continued to play between the two phials, juſt as when one phial was charged through the wire, the other through the coating, by the glaſs globe alone. And two phials charged, the one by the brimſtone globe, the other by the glaſs globe, would be both diſcharged by bringing their wires together, and ſhock the perſon holding the phials.

From theſe experiments, one may be certain that your 2d, 3d, and 4th propoſed experiments, would ſucceed exactly as you ſuppoſe, though I have not tried them, wanting time.——I imagine it is the glaſs globe that charges poſitively, and the ſulphur negatively, for theſe reaſons, 1. Though the ſulphur globe ſeems to work equally well with the glaſs one, yet it can never occaſion ſo large and diſtant a ſpark between my knuckle and the conductor when the ſulphur one is working, as when the glaſs one is uſed; which, I ſuppoſe, is occaſioned by this, that bodies of a certain bigneſs, cannot ſo eaſily part with a quantity of electrical fluid they have and hold attracted *within* their ſubſtance, as they can receive an additional quantity *upon* their ſurface by way of atmoſphere. Therefore ſo much cannot be drawn *out* of the conductor, as can be thrown *on* it. 2. I obſerve that the ſtream or bruſh of fire appearing at the end of a wire connected with the conductor, is long, large, and much diverging, when the glaſs globe is uſed, and makes a ſnapping (or rattling) noiſe: but when the ſulphur one is uſed, it is ſhort, ſmall, and makes a hiſſing noiſe; and juſt the reverſe of both happens, when you hold the ſame wire in your hand, and the globes are work'd alternately: the bruſh is large, long, diverging and ſnapping (or rattling) when the ſulphur globe is turn'd; ſhort, ſmall, and hiſſing, when the glaſs globe is turn'd.—When the bruſh is long, large, and much diverging, the body to which it joins, ſeems to me to be throwing the fire out; and when the contrary appears, it ſeems to be drinking in. 3. I obſerve, that when I held my knuckle before the ſulphur globe, while turning, the ſtream of fire between my knuckle and the globe, ſeems to ſpread on its ſurface, as if it flow'd from the finger; on the glaſs globe 'tis otherwiſe. 4. The cool wind (or what was call'd ſo) that we uſed to feel as coming from an electrified point, is much more ſenſible, when the glaſs globe is uſed, than when the ſulphur one.—But theſe are haſty thoughts. As to your 5th paradox, it muſt likewiſe be true, if the globes are alternately work'd; but if work'd together, the fire will neither come up nor go down by the chain, becauſe one globe will drink it as faſt as the other produces it.

I ſhould be glad to know whether the effects would be contrary, if the glaſs globe was ſolid, and the ſulphur globe hollow; but I have no means at preſent of trying.

In your journeys, your glaſs globes meet with accidents, and ſulphur ones are heavy and inconvenient. *Query.* Would not a thin plane of brimſtone, caſt on a board, ſerve on occaſion as a cuſhion, while a globe of

BENJAMIN FRANKLIN *Experiments and Observations on Electricity* LONDON, 1751 THE WARNOCK LIBRARY Octavo